<u>REMARKS</u>

In the Office Action dated April 7, 2006, claims 1-4, 6-12, 14-17, 19-36, and 39-53 were rejected under 35 U.S.C. § 102 over U.S. Patent Application Publication No. 2002/0029287 (Yemini); and claims 5, 13, 18, 37, and 38 were rejected under § 103 over Yemini in view of U.S. Patent No. 6,272,129 (Dynarski).

It is respectfully submitted that independent claim 1 is not anticipated by Yemini. Yemini describes a network organized to provide dynamic allocation of addresses to nodes according to their relative location within a graph, where the addresses are dynamically updated as a node joins or moves in the network, or if a link or node fails. Yemini, ¶ [0033]. However, it is important to note that the addresses assigned in Yemini are different from IP (Internet Protocol) addresses. Yemini makes the following explicit statement:

> *Differing* from the addresses *in the present invention*, IP addresses contain little routing information other than the network and host identifiers.

Yemini, ¶ [0011] (emphasis added).

The addresses assigned in Yemini are labels, which are *not* IP addresses. Links (that connect nodes) in the Yemini system are assigned labels, and each node in the Yemini system is assigned a label based on the link labels. Yemini, ¶ [0068]. Table 1 in ¶ [0070] of Yemini shows an example table of nodes and their respective labels. Clearly, these labels that are assigned to nodes and links in Yemini are not IP addresses. Yemini uses the labels assigned to the nodes, rather than IP addresses, to provide purportedly more efficient management in response to changes to topology of a network, to nodes moving around in the network, or to link failures. Yemini, ¶¶ [0035], [0036].

Yemini does refer to IP addresses, and mentions that a DART network (which is the network according to Yemini that uses labels assigned to nodes and links) can interact with other technologies, including the Internet, Ethernet, and so forth. Yemini, ¶ [0101]. Yemini mentions that the DART network can be layered on top of an IP network, where DART data can be encapsulated in IP packets and tunneled between IP routers between DART routers. *Id.* However, the fact that a DART network as taught by Yemini can be layered on top of an IP network does not change the fact that the techniques for managing the assignment of labels to nodes and links, for managing movement of nodes, and for managing failures of links, is still

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based on the use of labels that are expressly stated by Yemini as being different from IP addresses.

The Office Action specifically cited to Yemini at ¶¶ [0112] and [0101] as disclosing the retrieving of a set of IP routes linking server IP addresses and client IP addresses, as recited in claim 1. As noted above, ¶ [0101] of Yemini describes the inter-operation between a DART network and other types of networks, where a DART network can be layered on top of an IP network. Paragraph [0101] also mentions that a node on the DART network can be assigned an IP address. However, there is no mention in this passage of ¶ [0101] of Yemini of retrieving a set of IP routes linking server IP addresses and a client IP address. Paragraph [0112] of Yemini describes what Yemini perceives to be the downside of using IP addresses. Yemini states that an attacker of a network can perform a port scan where the attacker checks every known port on a list of IP addresses to see which services are available. This was considered as a weakness of using IP addresses. Yemini states that by using labels for nodes in the technique described in Yemini, the ability of obtaining such labels can be restricted to provide enhanced security. Thus, although ¶ [0112] refers to a list of IP addresses, this list of IP addresses is accessed in the context of an attacker performing port scans to determine what services are available. Yemini seeks to prevent an attacker from checking each known port on a list of IP addresses by providing the use of labels for nodes, where access to the labels can be restricted. As explicitly stated by Yemini, the labels are not IP addresses.

The Office Action further cited to ¶ [0035] of Yemini as teaching the selecting of an IP route from the set of IP routes which meets predetermined criteria. Paragraph [0035] of Yemini refers to the propagation of labels (again explicitly stated by Yemini as being different from IP addresses) to other nodes. The term "criteria" in ¶ [0035] of Yemini refers to criteria to determine which labels are propagated to other nodes. There is no *selection* of an IP route from a set of IP routes performed in ¶ [0035] of Yemini.

As discussed above, Yemini is clearly directed to different subject matter than the subject matter of claim 1. Therefore, it is respectfully submitted that Yemini does not anticipate claim 1.

Independent claim 15 is allowable over Yemini for similar reasons.

Independent claim 25 is also allowable over Yemini, which does not disclose a domain name system server, coupled to routers, for downloading IP routes from the routers for storage

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in an IP routes database, and, in response to a query containing the domain name (associated with servers) received from a client computer, selecting one of the IP routes contained in the IP routes database which meets predetermined criteria.

Dependent claims are allowable for at least the same reasons as corresponding independent claims. With respect to some of the dependent claims, the Office Action argued that the further recited features of the dependent claims are "inherent" in Yemini. However, it is respectfully submitted that no objective evidence has been provided in the Office Action to establish that the recited features of such claims are inherent.

> In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the alleged inherent characteristic <u>necessarily</u> flows from the teachings of the applied prior art.

M.P.E.P. § 2112 (8th ed., Rev. 3), at 2100-157 (emphasis in original).

Except for a simple conclusory statement that the recited features are "inherent," the Office Action has not provided the required "basis in fact and/or technical reasoning" to support the inherency rejection.

With respect to dependent claim 4, the Office Action stated that "using a BGP protocol" is an "inherent feature of edge router." 4/7/2006 Office Action at 3. It is respectfully submitted that a use of the BGP protocol is clearly not a *necessary* feature of an edge router. Therefore, the statement that the BGP protocol is an inherent feature of a router is factually incorrect. It is respectfully submitted that the Office Action has failed to establish the rejection of claim 4 based on inherency.

Similarly, with respect to dependent claims 6, 17, and 19, the Office Action has also failed to establish that the recited features of those claims are inherently part of the system of Yemini.

With respect to dependent claim 7, the Office Action cited ¶ [0125] of Yemini as teaching the selecting of an IP route that has a shortest *AS path*. That is clearly not the case. Similarly, the Office Action cited the same passage of Yemini as disclosing selecting the IP route from the set that has a lowest origin type (recited in dependent claim 8). No mention of origin type is made anywhere in ¶ [0125] of Yemini. Nor does the cited passage of Yemini in ¶ [0125] disclose selecting an IP route that has a lowest MED (claim 9), or that is equal to a default IP address (claim 10).

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Similar defects exist with respect to other dependent claims, which are too numerous to completely list in this Reply.
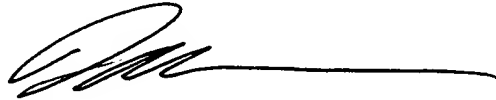
In view of the allowability of base claims over Yemini, it is respectfully submitted that the obviousness rejection of dependent claims over Yemini and Dynarski has also been overcome.

In view of the foregoing, allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 08-2025 (10006946-1).

Respectfully submitted,

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Dan C. Hu
Registration No. 40,025
TROP, PRUNER & HU, P.C.
1616 South Voss Road, Suite 750
Houston, TX 77057-2631
Telephone: (713) 468-8880
Facsimile: (713) 468-8883